

# The Monthly Labor Review at 100—part IV: employee benefits, industries and occupations, and worker safety and health since 1980

*To help mark the Monthly Labor Review's centennial, the editors invited several producers and users of BLS data to take a look back at the last 100 years. This fourth, and last, article in the series continues the story of the Review's history since 1980, chronicling events in the areas of benefits, industries and occupations, and workplace safety and health.*

In the last 35 years, the *Review's* coverage of labor-related topics has grown in both depth and extent. Reflecting upon these developments, the previous installment presented three of the most important issues discussed on the pages of the journal since 1980: inflation, employment, and the labor force. This final article embarks on a similar task, this time focusing on studies related to employee benefits, industries and occupations, and workplace safety and health.



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## Benefits

Before 1979, the Bureau of Labor Statistics (BLS) got its information about benefit plans by studying employers' documents detailing the provisions and costs of those plans. That year, however, BLS initiated the annual Employee Benefits Survey (EBS), covering medium-size and large private sector establishments. Respondents to the survey provide data on the coverage and provisions that their plans offer employees, and BLS analyzes the data and publishes statistics on those plans in, among other places, the *Review*. Data from the EBS began coming in and, together with data from other sources, informed the *Review's* pages throughout the 1980s. What was learned about employee benefits and their changes during that decade is reflected in a sample of articles published over that timeframe. Among the earliest beneficiaries of data from the new EBS were BLS researchers Donald Bell and Avy Graham, who examined "Surviving spouse's benefits in private pension plans" in the April 1984 issue of the *Review*. They found that, although most private pension plans were offering a lifetime minimum annuity of about 40 percent of a worker's accrued benefits to surviving spouses, many

spouses were receiving a smaller share and many others were not covered at all. In addition, a spouse could lose benefits under certain conditions. The authors cited a bill, approved by the U.S. Senate in 1983, that would remedy the deficiencies mentioned here, as well as other shortcomings. (The bill, the Retirement Equity Act, was passed by Congress in 1984.) Then, in the very next issue of the *Review*, EBS data aided Bell again, who, this time with Diane Hill as coauthor, investigated “How social security payments affect private pensions” (May 1984). The authors concluded that coordinating both sources of retirement income tends both to lower the cost of private pension plans for employers and to result in plans that replace a larger percentage of preretirement earnings for higher paid workers.

In a February 1985 *Review* article, William J. Wiatrowski used EBS data to look into “Employee income protection against short-term disabilities” and found that “most workers in medium and large firms are protected, but the degree and duration of protection vary.” Also, “usually white-collar workers get sick leave benefits,” reflecting the relative ease with which those workers’ regular weekly or monthly pay can be continued during periods of disability, “while blue-collar workers are covered by sickness and accident insurance,” because those workers receive a rate per hour worked rather than a fixed salary.<sup>1</sup> Overall, said Wiatrowski, the incidence of short-term disability plans was highest in public utilities and lowest in services. Clearly, the EBS was becoming a highly useful resource for analysis, and subsequently, complementing Wiatrowski’s article was Diane B. Hill’s “Employer-sponsored long-term disability insurance” (July 1987), in which, she, like Wiatrowski, turned to the EBS for information. Understanding that long-term disability insurance provides income to disabled workers until their retirement or a specified age, Hill made clear that benefits usually do not begin until short-term disability payments (e.g., the disability insurance portion of Social Security) are exhausted. She cited the growth of long-term disability income protection since 1963, an increase of 19 million workers covered. Finally, closing out sample articles from the 1980s are two from Rita S. Jain with the tongue-in-cheek titles “Employer-sponsored vision care brought into focus” (September 1988) and “Employer-sponsored dental insurance eases the pain” (October 1988). In the first, Jain reported the doubling of employee participation in employer-sponsored vision care plans in medium-size and large firms from 1980 to 1986, with coverage rising 150 percent for white-collar workers and 60 percent for blue-collar workers. In the second, she recounted a 27-percent increase in employee participation in employer-sponsored dental insurance plans over the 1980–86 period, with coverage rising 28 percent for white-collar workers and 21 percent for blue-collar workers.

One issue oft written about in the 1990s—and that still makes headlines today—was workers’ growing desire to balance their worklife with family aspirations and obligations. In this regard, Cathy A. Cooley’s June 1990 report, “1989 employee benefits address family concerns,” presented the results of the recently released 1989 EBS. Analyzing those results, Cooley found that, in medium-size and large private firms, “unpaid maternity leave was available to nearly two-fifths of employees, unpaid paternity leave to almost one-fifth; reimbursement accounts to help pay for medical and dental care expenses were offered to about one-fourth of workers; and flexible work arrangements were provided to one-tenth of employees.” The data on flexible work arrangements were new to the survey. In another EBS-based article, Michael A. Miller used the results of that survey to examine “Time-off benefits in small establishments” (March 1992). Appearing for the first time in the survey, data on time-off benefits in small establishments showed that in 1990 those establishments offered less generous provisions for leave than did both larger establishments and government agencies. The contrast was stark, with larger establishments offering “a full range of formal leave plans designed to provide time off for vacations, sickness,

funerals, and other personal commitments” and smaller establishments providing “time off only for holidays, or... bas[ing] time-off policies on individual performance.”



In a departure from usual, both in utilizing resources in addition to the EBS and in expanding the scope of an article on benefits, Laura A. Scofea examined “The development and growth of employer-provided health insurance” (March 1994). Tracing the history of health insurance plans from not long after the founding of the nation to the present, she brought to light the interesting fact that “the earliest coverage for health services in the United States dates to 1798, when the Congress established the U.S. Marine Hospital services for seamen.” To fund the services, compulsory payments were deducted from the sailors’ salaries. Despite this early effort, health insurance did not begin to resemble its current form until 1929, with the establishment of Blue Cross. “Health care is now comprehensive,” reported Scofea, “providing hospital, surgical, and medical benefits and also may include such benefits as dental, vision, mental health, and home health care.” In a more limited health insurance study based solely on 1979–92 data from the Current Population Survey (CPS), Craig A. Olson looked at “Health benefits coverage among male workers” (March 1995) and found that, contrary to the general trend, the proportion of married men between 25 and 55 years old with employer-provided health coverage fell substantially, from 89 percent in 1979 to 77 percent in 1992. The decline was most dramatic among younger, less educated workers, and Olson attributed all of it to changes in the structure of the labor market. Perhaps anticipating the future course of events, he opined that “the declines are substantial enough to generate widespread public concern about access to health care and its cost.”

In 1993, the U.S. Congress passed the Family and Medical Leave Act (FMLA), a law that requires private employers with 50 or more workers and all public employers to offer up to 12 weeks of unpaid family or medical leave to qualified employees who request such leave for certain authorized reasons (including caring for a newborn or an ill family member). Coverage increased after passage of the act and was even offered by employers that were not required to do so. To examine the impact of the act, Jane Waldfogel surveyed “Family leave coverage in the 1990s” (October 1999) and came up with a wide range of statistics which showed that the act had a substantial effect during that decade. Specifically, among other things, Waldfogel found that, for full-time employees in medium-size and large establishments, the percentage of workers with maternity leave coverage rose from 39 percent in 1991 to 95 percent in 1997 and the percentage of workers with paternity leave coverage increased from 27 percent in 1991 to 95 percent in 1997; for part-time employees in medium-size and large establishments, the percentage of workers with maternity leave coverage grew from 20 percent in 1991 to 54 percent in 1997 and the percentage of workers with paternity leave coverage advanced from 14 percent in 1991 to 54 percent in 1997; and for full-time employees in small establishments (whose employers were not subject to the act), the percentage of workers with maternity leave coverage went from 19 percent in 1990 to 50 percent in 1996 and the percentage of workers with paternity leave coverage expanded from 8 percent in 1990 to 50 percent in 1996. Waldfogel concluded that the FMLA had overcome the skeptics’ fear that the act “might have little effect on family leave coverage, because it excluded so many workers and firms and because many of those it covered had family leave rights already.”

In December 2000, BLS introduced the National Compensation Survey (NCS), which combined the Employment Cost Index survey, the EBS, and the Occupational Compensation Survey into one comprehensive survey intended to supplant the three separate surveys. For a time, however, the EBS and the NCS ran concurrently and articles based on the EBS were still in progress. One such article that came to fruition in February 2001 was “Pension integration and retirement benefits,” by Keith A. Bender. The term “pension integration” refers to the combination of income from Social Security with income from a pension in such a way that a retiree’s total benefit amount is less than the sum of the two incomes. The rationale behind pension integration is that coordinating pension income with Social Security income produces equitable retirement for all workers, independently of their earnings, while keeping employer costs lower than they would be in the absence of integration.<sup>2</sup> Using the EBS, Bender found that pension integration tends to increase benefits modestly for workers with less tenure on the job and decrease benefits substantially for workers with more tenure. Moreover, one kind of integrated plan, called an excess-rate plan, reduces total income further for highly paid workers. Thus, said Bender, because excess-rate plans are increasing as a proportion of integrated plans, “increasing numbers of people with integrated plans will be receiving substantially lower replacement rates than highly paid workers with nonintegrated plans.”

Two years later, in one of the first *Review* efforts relying on NCS data, Jared Bernstein and Maury Gittleman set themselves the task of “Exploring low-wage labor with the National Compensation Survey” (November/December 2003). Because the NCS has the advantage of being able to classify jobs by skill level through what it calls “leveling factors” (factors that take into account the knowledge required of the jobholder, the complexity of the job, whether the job has any supervisory responsibilities, and more), the authors were able to identify jobs requiring low-level skills and examine the pay and other characteristics of those jobs. Their analysis was in contrast to that of most others, which focused on the earnings and characteristics of low-wage workers, rather



than the skill demands of the jobs they held (no fault of those researchers, because, before the NCS, there simply were no reliable data on skill levels typified by jobs). What Bernstein and Gittleman found was that low-wage work is concentrated in jobs that require low-level skills. But what they also found was quite surprising: “the presence of a penalty to low-skilled work beyond what can be explained by factors describing the skills and knowledge required for the job.” In other words, the reason that low-paid workers are paid so low is only partly explained by the low skill levels the job requires; something else is at play, and it may be merely a statistical interaction effect among all the factors or a unique wage penalty carried by low-wage jobs. Either way, as the authors put it, “workers in these jobs face significant hurdles.”

Then, in August 2004, the *Review* published a special issue with a series of six articles on the NCS, which by now had replaced the EBS. The issue began with Allan P. Blostin’s overview article, “The National Compensation Survey: a wealth of benefits data,” which touted the NCS’s making available, for the first time, “information on...the percentages of establishments offering health insurance and retirement plans, and the percentage of medical premiums paid by employers and employees.” Seconding Blostin’s assessment was Jordan Pfuntner, who welcomed the arrival of “New benefits data from the National Compensation Survey”—data ranging from the aforementioned information cited by Blostin, to tabulations linking benefit plan coverage to workers’ wages, to new details on employer contributions to cash balance pension plans, on the types of bonuses offered employees, and on orthodontic coverage for dependents of employees. Next, in “Incidence benefits measures in the National Compensation Survey,” Carl B. Barsky repeated the theme of the NCS ushering in a first-time linkage between information on the health insurance and retirement benefits offered by establishments and the rates at which employees have access to, and participate in, those benefits. According to Barsky, the survey found that “the availability of and participation in health insurance, retirement, and other benefits were both much higher among employees who were in full-time occupations, [who were] covered by union contracts, and who worked in large establishments and in metropolitan areas.” Then, in “Medical and retirement plan coverage: exploring the decline in recent years,” William J. Wiatrowski considered the possible reasons for the 18-percentage-point drop in participation in employer-provided medical care plans between 1992–93 and 2003 that the NCS had brought to light. He concluded that the evidence suggested that, even when offered a plan by their employers, some employees chose not to participate in it, perhaps because they had access to coverage from other sources or because they judged the cost of the plan to be too high. Following on Wiatrowski’s article, Elizabeth Dietz used the NCS to examine “Trends in employer-provided prescription-drug coverage” and found that, not only did the cost of prescription drugs rise faster than inflation from 1993 to 2003, but also employees were sharing a greater portion of that cost. “With so many individuals covered through employer-based health plans,” she concluded, “the effects of cost shifts from employer to employee are broad reaching.” Finally, in the last article of the series, “New statistics for health insurance from the National Compensation Survey,” Michael Lettau reiterated the need for, and value of, the NCS: “The consolidation of the separate compensation surveys into the National Compensation Survey gives BLS an opportunity to expand the number and type of compensation measures it reports.” The end result is that the new statistics generated by the survey “should give data users a more complete understanding of the compensation package a U.S. worker typically receives.”

After the introduction of the NCS, the *Review* published research based on it in a number of articles that appeared from 2000 to 2015—and, true to the survey’s promise, the findings were many and varied. One area

of research was that of mental disorders and substance abuse. In April 2005, John D. Morton and Patricia Aleman used the NCS to show that, after decades of restrictions on coverage for mental disorders and substance abuse treatment, substantive changes introduced with the passage of the Mental Health Parity Act (MHPA) in 1996 finally moved coverage of those two conditions closer to that for other illnesses. Morton and Aleman's "Trends in employer-provided mental health and substance abuse benefits" cited NCS data which established, among other things, that the incidence of medical plans imposing more restrictive dollar limits on mental healthcare decreased from 41 percent in 1997 to 7 percent in 2002 for inpatient care and from 55 percent to 7 percent for outpatient care. The authors attributed these changes not just to the MHPA, but also to the states, 33 of which passed similar—and in some cases even stricter—parity acts after the MHPA was enacted.

Another area rife for investigation with the NCS was 401(k) retirement plans. Two *Review* articles published 8 years apart addressed this topic. In September 2007, Keenan Dworak-Fisher discussed "Employer generosity in employer-matched 401(k) plans, 2002–03." Selecting one type of 401(k) plan, the savings and thrift plan—"by far the most prevalent type of 401(k) plan offered" at the time—Dworak-Fisher found a negative correlation between match rates and the percentage of the employee's salary that is subject to the match; that is, plans with lower match rates tend to match a larger percentage of employees' salaries, and plans with higher match rates tend to match a smaller percentage of employees' salaries. Still, even given this correlation, says Dworak-Fisher, there is much diversity: "The structure of the match can vary along different dimensions or remain flat. It can be prespecified or left to the employer's discretion, and among prespecified plans, the match rates and amounts eligible for the match can vary substantially." The second article, "Automatic enrollment, employer match rates, and employee compensation in 401(k) plans," by Barbara A. Butrica and Nadia S. Karamcheva, was published in May 2015. In it, the authors used the NCS to examine differences in worker compensation between establishments that have automatic enrollment in 401(k) plans and those which do not. Like Dworak-Fisher before them, they found a negative correlation, this time between the employer match rate and automatic enrollment: plans with automatic enrollment offer lower match rates than do plans without automatic enrollment. They also found that plans with automatic enrollment tend to achieve higher participation rates—and they do so at a savings that roughly offsets the cost of automatic enrollment.

A third area of research amenable to analysis using the NCS—and a timely one today—was wage inequality. In "Compensation inequality: evidence from the National Compensation Survey" (July 2015), Kristen Monaco and Brooks Pierce showed that, despite all the research on wage and income inequality being published at the time, *total-compensation* (wages plus the cost of employer-provided benefits) inequality was even greater than wage inequality. The authors followed changes in both wages and total compensation from 2007 to 2014 and found that both measures fell for those whose income was below the 80th percentile (i.e., 80 percent of all workers). In other words, only those in the top 20 percent in each of the wage and total-compensation distributions saw real growth in their wages and total compensation, respectively, and most of that growth occurred at the 90th percentile and beyond. Also, the two series tracked each other but total compensation was consistently higher. In sum, there was both wage and total-compensation inequality between 2007 and 2014, but there was more total-compensation inequality. Finally, the shapes of both series indicated that inequality of both kinds had increased over the period examined. Further analysis led Monaco and Pierce to attribute the growing

compensation inequality to “a growing compensation gap between high- and low-earning occupations—and considerable intraoccupational inequality.”

At the core of all these NCS articles was the notion of a benefit *plan*. A plan was the unit of observation for all the *Review* authors—the unit they analyzed for the purpose of collecting and reporting statistics on benefits. However, health and retirement benefit plans were ever changing, making the measurement of employee benefits more and more complex. What was needed was a *meta-analysis*: an analysis, not of the data that benefit plans contained, but of the nature of a plan itself, the NCS’s *definition* of a plan—and authors Dworak-Fisher and Wiatrowski were up to the task, contributing two articles to the July 2011 issue of the *Review*. First, in “What is a benefit plan? Clarifying the NCS definition as health and retirement benefits evolve,” they identified two criteria for a definition of a plan: (1) “a benefit plan must entail some direct employer cost” and (2) a benefit plan must consist of “an inseparable set of provisions in a single benefit area offered to one or more employees.” The authors noted, however, that, since 1979, when BLS established its definition of a plan, “The world of benefits...has changed dramatically....The types of benefits and types of plans offered have expanded, employees are being given more choices, and employees must take more responsibility to ensure that their benefits meet their needs.” Accordingly, the concept of a plan, they observed, must be reexamined—and they went on to do so, exploring some of the issues involved and offering some insight into how the concept might have to change. (Notably, they did not presume to offer any actual definition, leaving that task to the many economists interested in the issue.) Then, in their second article, “Tackling complexity in retirement benefits: challenges and directions for the NCS,” Dworak-Fisher and Wiatrowski explained how the NCS could capture the changing landscape of retirement benefits that they had described so aptly in their first article. The data cited indicated that the survey was still useful but that there were some areas in which improvements could be made. In closing their analysis, Dworak-Fisher and Wiatrowski offered a set of recommendations that they maintained would help the NCS adjust to the evolution of the retirement benefits landscape.

## Industries and occupations

*Industries.* As it had in the past, from 1980 to 2015 the *Review* published numerous articles on a range of industries. Industries covered in the 1980s were the ball and roller bearing; coal; health services; transformer; machine tool; nonwool yarn mills; millwork; cosmetic; office furniture; commercial banking; pump and compressor; lumber and wood products; plastics; fabricated metals; electricity-measuring instruments; switchgear; meatpacking and prepared meats; apparel stores; air conditioners, refrigeration equipment, and furnaces; kitchen cabinet manufacturing; internal combustion engine; machine tool accessories; oilfield machinery; electronics; beauty and barber shops; metal doors, sash, and trim; business services; metal stamping; retail trade; retail liquor stores; poultry dressing and processing; furniture and home furnishings stores; steel and motor vehicles; producer service; nonelectric heating equipment; automotive repair shops; industrial inorganic chemicals; cotton and synthetic broad woven fabrics; semiconductor; organic chemicals; finance, insurance, and real estate; and men’s and boys’ suits and coats industries. Typically, articles dealt with productivity in those industries, but employment was another well-examined topic. For example, Edward S. Sekscenski followed the growth of the healthcare workforce during the 1970s in his May 1981 article, “The health services industry: a decade of expansion.” What he found was a workforce that grew from 4.3 million as the decade of the 1970 opened to 6.7 million in 1979, an increase of 55 percent—all at a time when the total

U.S. workforce grew by 23 percent. At the same time, and despite the higher earnings of physicians, dentists, and the like, wages and salaries in the industry were below the national average, owing chiefly to the lesser salaries of lower skilled workers in the industry. “The earnings of wage-and-salary health workers,” concluded Sekscenski, “did not generally reflect the dramatic rise in demand for their services.” On the topic of the relation between employment and productivity was John A. Alic and Martha Caldwell Harris’ “Employment lessons from the electronics industry” (February 1986), which examined an industry in which output nearly doubled between 1971 and 1981 yet employment dropped by half over the same timeframe. The authors attributed the incongruous situation chiefly to the advance of new technology. The lesson to be learned, they claimed, was that “new technology can cut into job opportunities even though output rises substantially.”

The 1990s saw *Review* articles on the scrap and waste materials processing, photographic equipment and supplies, rubber and plastics hose and belting, child daycare services, wood containers, household furniture, poultry-processing plants, fast-food restaurant, hardwood dimension and flooring, metal stampings, textiles and apparel, security brokers and dealers, retail miscellaneous shopping goods stores, software and engineering, commercial banking, semiconductors, refrigeration and heating equipment, mobile homes, fabricated platework, coal mining, paper, services, multimedia and digital visual effects, trucking, auto retailing, and health services industries. Again, productivity was the leading issue discussed, but other topics were examined as well. Robert W. Van Giezen, for instance, explored “Occupational wages in the fast-food restaurant industry” (August 1994), finding that nearly 70 percent of workers in the industry were 20 years old or younger, were working part time, and had wages closely tied to the minimum wage. Surveys of 40 cities, counties, or parts thereof conducted in 1990–91, reported the author, revealed that in only 3 of those jurisdictions were fast-food workers’ wages more than \$1 above the minimum wage. By 1992–93, only 1 such area remained. Another topic discussed was technological change and its effects, exemplified by two articles published in the August 1996 issue of the *Review*. In the first, “Commercial banking transformed by computer technology,” Teresa L. Morisi cited the increasing use of automated teller machines in both making banking convenient for consumers and contributing to employment declines in the banking industry. These two countervailing effects, said the author, portend a future in which commercial banks would achieve “a rise in real output, while providing more services with fewer employees”—a harbinger of events that we now know to have been borne out. In the second article, “The software and engineering industries: threatened by technological change?,” William C. Goodman pointed out that the computer software industry and the computer engineering industry are each producers of technological innovation and change yet, “ironically, technology also may reduce the number of careers in these industries, as advanced computer tools decrease the amount of labor required to design a product.” Among the tools mentioned by Goodman were computer-aided design/manufacturing (CAD/CAM), computer-aided software engineering (CASE), and artificial intelligence (AI), all having a beneficial impact on productivity and a detrimental impact on employment.

From 2000 to 2015, industries covered in the *Review* were manufacturing, information technology, retail trade, wholesale trade, electricity, air travel and airlines, securities, telecommunications, residential and nonresidential construction, creative arts, auto parts manufacturing, healthcare, finance, temporary help services, construction, and private community hospitals. Now, however, although there were the usual articles on productivity in some of those industries, other issues led the way. In May 2003, M. Scott Niederjohn reported on “Regulatory reform and labor outcomes in the U.S. electricity sector.” What Niederjohn found was intriguing: On the one hand,



deregulation of the sector over the previous 10 years had clearly led to employment reductions, with a 29-percent employment decline in the industry in states where restructuring took place, compared with 19 percent in states that had not yet undergone regulatory reform; on the other hand, real weekly wages and earnings of employees in the sector had risen, contrary to what many researchers had found in the airline, railroad, and trucking industries. The question was, how much of the increase in wages could be attributed to union influence in a heavily unionized industry and how much to regulatory reform itself? On the basis of the evidence (largely a 7-percentage-point decline in unionization in the electricity sector), Niederjohn concluded that the major part of the wage increase was due to the reform. Then, in the October 2007 issue of the *Review*, in their article “The economic impact of the creative arts industries: New York and Los Angeles,” Michael L. Dolfman, Richard J. Holden, and Solidelle Fortier Wasser examined the impact and value of the creative arts industries to the economies of those two powerhouse U.S. cities. Using the BLS Quarterly Census of Employment and Wages, the authors learned that, together, New York and Los Angeles accounted for 1 of every 4 creative arts jobs in the nation in 2006 and that, “by clustering, or concentrating, their resources in these two locations, the creative arts industries have been able to magnify their influence.” The authors emphasized the point that the harnessing of the talents of the creative arts labor force by organizing them chiefly into two U.S. locales “brings out the importance of geographic concentration.”

Later, in two articles dealing with high-tech industries, two BLS authors analyzed employment and wages (“Crash and reboot: Silicon Valley high-tech employment and wages, 2000–08,” by Amar Mann and Tian Luo, January 2010) and business survival and growth (“Survival and growth of Silicon Valley high-tech businesses born in 2000,” by Luo and Mann, September 2011) in those industries in Silicon Valley, the preeminent U.S. locale for high-technology industries. In the first article, the authors recorded a sharp decline in employment and wages in most high-tech industries in the valley from 2000 to 2004, followed by a gradual increase in both measures from 2004 to 2008. The only industries that grew over the entire period, which encompassed both the peak of the dot-com era and the ensuing dot-com bust, were pharmaceuticals and scientific research. Valley industries lost nearly 20 percent of their workforce, in total, and suffered a 13.5-percent decrease in real wages. These figures contrast with a 6.2-percent drop in employment and a 1.3-percent *rise* in real wages for non-Silicon Valley high-tech industries over the same timeframe. The authors concluded that, despite the employment and wages setbacks, “Silicon Valley...continues to evolve while still remaining a breeding ground for technological advancement and ingenuity.” In the second article, the authors found, in accordance with the results of their previous article, that Silicon Valley high-tech businesses born in 2000, the year in which the dot-com bubble reached its apex, had below-average survival and employment growth rates from 2000 to 2009, except for the year 2000 itself, which saw the firms that managed to survive experience growth lasting for the next 8 years. In comparison to a typical Silicon Valley high-tech business born between 1991 and 2009, however, the 2000 cohort that survived until 2009 had 27 percent lower average employment growth over the first 10 years of its life cycle. Similarly, the survival rate of the same 2000 cohort was about 39 percent lower than that of the typical Silicon Valley high-tech business born between 1991 and 2009. A mitigating circumstance, and perhaps a cause for optimism among the bleak figures, the authors noted, was that, “after adjustment for year-specific and industry-mix effects, the cohort [was] seen to have had indistinguishable differences from all high-tech firms existing from 2000 to 2009 as regards rates of survival and growth.”



*Occupations.* As with industries, from 1980 to 2015 the *Review* published a large number of articles on many occupations. Occupations covered during that timespan were appliance repair technicians; hotel workers; certificated air carriers; hospitals; advertising; commercial banking; professions; nonprofit organizations; direct-care workers; teachers; service-providing occupations; science, technology, engineering, and mathematics occupations; green jobs and technologies; and agriculture. Besides reporting on specific occupations, the *Review* examined a host of issues affecting workers in general and in occupational groups. Typical of such articles written during the decade of the 1980s is “Occupational mobility and job tenure in 1983,” by Ellen Sehgal. Appearing in the October 1984 issue of the *Review*, the article sought to confirm or disconfirm the widely held notion that American workers change occupations and employers far more than workers in other industrial nations do. Using special questions asked of CPS respondents to ascertain how long they had been with their current employer, the author found that one-third of workers ages 35 to 44 had been with the same employer 10 years or longer and one-third of workers ages 45 and older had been with the same employer 20 years or longer. She also found that workers in the former age group had a mobility rate of 7 percent and those in the latter, 4 percent. By contrast, the mobility rate of younger workers—those 16 to 24 years old—was 22 percent. Sehgal summed up the situation by observing that “the extensive mobility attributed to American workers applies for the most part to young, not older, workers,” thus “support[ing] the contention that mature American workers, on average, show substantial job stability,...making them not too unlike [for example] the workers of Japan.” Then, in “Occupational change: pursuing a different kind of work,” in the September 1989 issue of the *Review*, James P. Markey and William Parks II investigated the reasons workers switched from one occupation to another. They found that, of the 10 million workers who switched occupations in 1986, half did so for more pay, better working conditions, or increased opportunities for advancement. On the downside, another one-eighth of workers switched because they lost their previous job. The authors also found that (1) as Sehgal had found, age is the key factor determining occupational mobility, with younger workers more mobile than older ones; (2) workers with higher levels of education had higher rates of voluntary mobility; (3) entire career changes—workers with some tenure in an occupation moving to another occupation with another employer—were uncommon; and (4) involuntary changes in occupation frequently resulted in lower pay in the new job, with most such workers moving from goods-producing to service-providing occupations.

With the arrival of the 1990s came a quartet of articles on a timely topic of the decade: whether the prevailing economic circumstances were compelling college graduates to take jobs that were incommensurate with the level of education they had received. In the first article, “Reconciling conflicting data on jobs for college graduates,” appearing in the July 1992 issue of the *Review*, Daniel E. Hecker asked the question “If, as some analysts contend, the rising relative wages of college graduates in the 1980’s suggest a shortage of these workers, why did one-fifth of them accept jobs that traditionally do not require a degree for entry?” In answering the question, Hecker concluded that a restructuring of the economy was taking place that was moving many high school graduates into lower paying jobs and a number of college graduates into jobs that paid substantially less than the average (perhaps the very jobs vacated by the high school graduates). The alternative view, that the rising relative earnings of college graduates signaled a shortage of those workers, held that the phenomenon of some college graduates taking jobs that did not require a college degree was a short-lived one and not reflective of any restructuring of the economy. Hecker noted that this view did not appear to be consistent with the data underlying his analysis. In the second article, “Recent data on job prospects of college-educated youth,” in the August 1993 issue, Paul Ryscavage came down mostly, but not unequivocally, on the

side of Hecker. Learning from CPS data that the unemployment rates of young, college-educated workers began to rise, and their real wages began to fall, toward the end of the 1980s and on into the 1990s, Ryscavage judged that it was likely that there were changes in the jobs these individuals moved into over that timeframe and that those changes “might be suggestive of a qualitative deterioration.” Then he used the Survey on Income and Program Participation (SIPP) to determine that there was a slight shift of young, college-educated workers away from executive, managerial, and professional specialty occupations toward lower paying technical, sales, and administrative support occupations. In the end, though, he concluded that the SIPP was not robust enough to decide whether the shift was due primarily to the recession of 1990–91 and would disappear once the economy recovered or whether it would become a new, “permanent” feature of the U.S. economic landscape. The third article, published in December 1995, posed the question “Are more college graduates really taking ‘high school’ jobs?” In it, John Tyler, Richard J. Murnane, and Frank Levy took issue with Hecker’s conclusion, claiming that there was in fact no restructuring of the U.S. economy and arguing instead that (1) a college education still had substantial economic value, (2) those college graduates who did take jobs requiring only a high school education were, for the most part, older men long out of college who were victims of the restructuring of white-collar jobs alone, and (3) by contrast, recent college graduates—both men and women—were “adept at moving into occupations that were expanding and had high wages.” In other words, the widening earnings gap between those with a college degree and those with just a high school diploma—a gap that Hecker had pointed to and that Ryscavage had also alluded to—was real, maintained Tyler, Murnane, and Levy, but there was no evidence that *recent* college graduates were having to take the lower paying “high school” jobs. Finally, in the same issue of the *Review*, Hecker replied to Tyler, Murnane, and Levy in “College graduates in ‘high school’ jobs: a commentary.” Acknowledging their “contribution to information about the college graduate job market through their analysis of young graduates and older graduates, separately for men and women [and] using 1980 and 1990 census data,” he nonetheless expressed a couple of reservations regarding the significance of some portions of their analysis and the completeness of the overall analysis, before going on to suggest how those reservations could be overcome.

Two articles on occupations stand out from among those appearing in the *Review* from 2000 to 2015. In a comprehensive article published in the March 2006 issue, Ian D. Wyatt teamed up with Hecker to examine “Occupational changes during the 20th century.” The piece seized upon the timely availability of the 2000 census to paint a panoramic picture of the changing occupations, occupational groups, and occupational staffing patterns in the United States over the course of the entire 20th century. What they found was utterly fascinating, though perhaps not surprising: between 1910 and 2000, professional, managerial, clerical, sales, and service workers other than private household service workers grew from one-quarter to three-quarters of total U.S. employment. Over the same timeframe, laborers (except mine laborers), private household service workers, and farmers lost the most jobs. The authors connected their findings to the biennial BLS program of 10-year occupation and industry employment projections, extrapolating their results to project that “many of the long-term trends described in this article will continue into the 21st century.” Specifically, Wyatt and Hecker projected that, from 2004 to 2014, professional and related occupations and health service workers would increase their share of total employment; construction occupations and installation, maintenance, and repair occupations would maintain their share of total employment; and production occupations, office and administrative support occupations, and agricultural managers and agricultural workers would decline in their share of total employment. The second article, “How shifting occupational composition has affected the real



average wage,” by Rebecca Keller, appeared in the June 2009 issue of the *Review*. Using 2000–07 data from the BLS Occupational Employment Statistics program, the article confirmed the widely held view among economists that the U.S. economy was experiencing an overall shift in employment toward occupations with lower mean wages, but went further, showing that (1) the shift hindered growth in the U.S. real average wage, (2) wage growth, though minimal, was concentrated in higher paying occupations, and (3) the shift in employment was to the highest and lowest paying occupations and depleted jobs in middle-paying occupations. Another finding pertained to the geographical mix of shifts in employment: the five states with the most pronounced shifts in employment toward occupations with lower mean wages were Pennsylvania, New Mexico, Missouri, West Virginia, and Nebraska, while the five jurisdictions with the most pronounced shifts in employment toward occupations with higher mean wages were New York; California; New Jersey; Washington, DC; and Wyoming.

## Workplace injuries and illnesses, and occupational safety and health

Workplace safety had always been a major concern of the *Review*. But with the 1970 passage of the Occupational Safety and Health Act, which established the Occupational Safety and Health Administration (OSHA), *Review* authors not only could write about the devastating effects of hazards in the workplace, but, because of the statistics that OSHA would now engender, also could contemplate attempts at minimizing their occurrence. From 1980 to 2015, more than 250 articles were published on these twin, complementary topics, beginning with a special section of seven articles on “Job-related injury and illness” in the March 1981 issue. The section led off with the historical “The job safety law of 1970: its passage was perilous,” in which Judson MacLaury described the 3-year-long contentious legislative back-and-forth culminating in the enactment of the Occupational Safety and Health Act. Next, Harvey J. Hilaski cited “the peculiarities of the recordkeeping regulations and problems of recognizing and reporting occupational diseases” as the prime factor standing in our way of “Understanding statistics on occupational illness.” These peculiarities and problems, he observed, lead to a suspicion, partially justified, that BLS estimates of occupational illnesses are seriously understated. Worse, “because of the complexities involved in the occupational disease area,...expectations for a quick or easy solution are unrealistic.” Following Hilaski was Norman Root, whose article “Injuries at work are fewer among older employees” contradicted the results of other studies, some of which found that injury rates were higher at both ends of the age distribution, others of which found that rates were higher in the middle, and still others of which found no significant differences in rates across age groups. In drawing his conclusion, Root used the BLS Supplementary Data System (SDS) to analyze information on more than a million workers. Then, also using the SDS, David P. McCaffrey analyzed “Work-related amputations by type and prevalence” and found that 21,000 amputations were performed on parts of the body injured in workplace accidents in 23 states in 1977, with 95 percent of the amputations involving the loss of a finger. About 60 percent of the amputations were the result of accidents in the manufacturing sector, which represented just 31 percent of employment at the time. In the final three articles of the series, “Using statistics to manage a State safety and health program,” by Philip A. Workman; “Workers’ compensation insurance: recent trends in employer costs,” by Martin W. Elson and John F. Burton, Jr.; and LaVerne C. Tinsley’s “Workers’ compensation in 1980: summary of major enactments,” the authors discussed, respectively, Ohio’s accident prevention program’s use of statistics on

occupational injuries and illnesses, the escalating costs of workers' compensation insurance for work-related injuries and diseases, and the broader coverage and levels of workers' compensation benefits enacted by many states in 1980.

The September 1983 issue of the *Review* also featured the SDS. In their article "Motion-related wrist disorders traced to industries, occupational groups," Roger C. Jensen, Bruce P. Klein, and Lee M. Sanderson, a trio of researchers from the U.S. Public Health Service's National Institute for Occupational Safety and Health, used workers' compensation claims from that dataset and found that "Jobs that involve repetitive motions of the hand contribute disproportionately to a number of injuries and illnesses," including carpal tunnel syndrome, tendinitis, and tenosynovitis. The authors also found that workers in manufacturing, construction, and agriculture were most at risk.

Then, four articles on workplace fatalities published annually from 1984 to 1987 afforded mixed results on the efficacy of the Occupational Safety and Health Act. In the first, "BLS' 1982 survey of work-related deaths" (March 1984), Janet Macon reported that private sector establishments with 11 or more employees recorded 4,090 work-related deaths in 1982, compared with 4,370 in 1981. In the second, Diane M. Cotter found that "Work-related deaths dropped sharply during 1983, BLS survey finds" (September 1985). The number recorded was 3,100, a total of 990 less than the previous year's figure. The third article, Cotter's "Work-related deaths in 1984: BLS survey findings" (May 1986), reported 3,740 occupational fatalities in 1984, an increase of 640 over the 1983 number. In the fourth article, "Deaths in industry, 1985: BLS survey findings" (April 1987), Macon and Cotter together cited 3,750 work-related deaths in 1985, slightly more than in 1984. The survey referred to in all four articles was the BLS Survey of Occupational Injuries and Illnesses, still in use today.

As regards reporting on workplace injuries and illnesses in the *Review*, the year 1989 and the decade of the 1990s were dominated by three BLS researchers: economists Martin E. Personick and Guy A. Toscano and epidemiologist Janice A. Windau. The year 1989 saw three articles coauthored by Personick on injuries and illnesses in specific industries. The first two, part of the "Profiles in safety and health" series, were "Occupational risks in meatpacking" (January) and "Work hazards of mobile homes" (July). In the article on the meatpacking industry, Personick and coauthor Katherine Taylor-Shirley pointed to an injury and illness rate above the average for the total economy and 2 to 3 times the all-manufacturing rate. Concomitant with the high injury and illness rates was a high turnover rate in the industry. The authors cited testimony of the American Meat Institute before Congress in which the institute outlined an agenda for improving plant safety. In the article on mobile homes, Personick and coauthor Judy R. Daley looked into the safety hazards posed by an industry ranked among the top 10 high-risk industries in the nation. What they found was a largely inexperienced workforce in an industry whose incidence of workplace injuries and illnesses was double that of construction—the most hazardous *major* industry group—and more than triple that of private industry as a whole. At the conclusion of the article, Personick and Daley offered a number of actions that would minimize safety and health hazards, especially for inexperienced workers. The third article, with the double-entendre, tongue-in-cheek title "Job hazards underscored in woodworking study" (September), featured the millwork manufacturing industry. In it, Personick and coauthor Elyce A. Biddle described an industry "buoyed by surging markets for new houses and home remodeling" but beset by "persistent safety and health problems facing the industry's workers." Employing about 100,000 workers nationwide but concentrated in seven states—California, Wisconsin, Texas, Minnesota, Oregon, Ohio, and Washington—the industry "has experienced rates of workplace injuries and illnesses well

above those for all manufacturing” throughout the years. The authors linked the high rates to certain industry characteristics, such as inexperienced workers, nonunion establishments, labor-intensive machine-aided processes, and high labor turnover rates resulting in a loss of experienced workers.

The prolific Personick continued his studies of injuries and illnesses in specific industries into the 1990s with 10 *Review* articles published from 1990 to 1996: “Nursing home aides experience increase in serious injuries” (February 1990); “Heat burns sustained in the workplace” (July 1990); six entries in the “Profiles in safety and health” series—“Roofing and sheet metal work” (September 1990), “Eating and drinking places” (June 1991), “Fabricated structural metal” (December 1991, with Elyce A. Biddle and Amy Lettman), “The soft drink industry” (April 1992, with Laura A. Harthun), “Retail grocery stores” (September 1992, with Sarah O. Company), and “Hotels and motels” (July 1993, with John J. Kane)—“Self-employed individuals fatally injured at work” (August 1995, with Janice A. Windau); and “Improvements in the BLS safety and health statistical system” (April 1996, with then-BLS Commissioner Katharine G. Abraham and then-Acting BLS Assistant Commissioner William L. Weber), which discussed the introduction into the BLS Survey of Occupational Injuries and Illnesses (SOII) and Census of Fatal Occupational Injuries (CFOI) of new measures of risk, severity, and circumstances pertaining to work-related injuries, illnesses, and fatalities.

Over the same period in which Personick was publishing, the duo of Toscano and Windau penned three articles from 1992 through 1994 and one more in 1999. The three articles from the early 1990s showcased the new BLS CFOI. In the first, “Fatal work injuries: census for 31 states” (September 1992), the authors summarized the initial results for the 31 states that participated in the first implementation phase of the CFOI program. They commended the new census as providing better data on work-related fatalities—data that, they believed, could help in preventing future deaths in the workplace. The second article, “Fatal work injuries: results from the 1992 national census,” was published in the October 1993 issue of the *Review*. By that time, the CFOI had been implemented in all 50 states and the District of Columbia. Through the CFOI, Toscano and Windau discovered that highway accidents and homicide were the leading causes of the more than 6,000 fatal work injuries recorded in 1992. The authors projected that the CFOI national database would help users generate fatality profiles for specific industries, demographics (e.g., women and workers of various racial and ethnic groups), machines (such as farm equipment), and events (e.g., what a worker was doing at the time he or she was fatally injured by an electric current). In the third article, Toscano and Windau used the 1993 CFOI to point out “The changing character of fatal work injuries” (October 1994). Their research revealed that most job-related fatalities were now occurring in service-providing industries, particularly transportation and retailing. As in 1992, in 1993 the leading causes of fatal work injuries were highway accidents and homicide. In their final coauthored article, Toscano and Windau teamed up with fellow BLS economist Eric Sygnatur in June 1999 to present a “Profile of work injuries incurred by young workers.” Using both the CFOI and the SOII, the trio found that it was the hazardous environments in which young people worked that put them at risk of serious and even fatal injuries. “Young workers,” they said, “have been killed on construction sites, during robberies while tending retail establishments, and while working on farms.” The authors stressed that concerns for the safety of youths are important because “youth fatalities and other serious injuries tend to have a greater emotional impact on society.”

In between the works of Personick, on the one hand, and Toscano and Windau, on the other, during the 1990s were just six *Review* articles on workplace injuries and illnesses, and occupational safety and health, by other

authors. In April 1992, accompanying Personick and Harthun's article on safety and health in the soft-drink industry, were two other articles on work injuries and illnesses and occupational safety and health. In one of them, Richard E. Wokutch and Josetta S. McLaughlin compared "The U.S. and Japanese work injury and illness experience" and found that Japan had a lower incidence and severity of work injuries and illnesses than the United States had, although the two countries' fatality rates were comparable. In the other article, examining the "Safety and health experience of pilots and flight attendants," Jack Reardon reported that air transportation workers had a relatively high rate of disabling injuries and illnesses, with pilots and flight attendants commonly sustaining serious sprains and strains. Reardon followed up his study of airline workers with an October 1993 article on "Injuries and illnesses among bituminous and lignite coal miners" in which he reported that "surface mining is safer than underground mining; the preponderant injury categories are sprain, contusion, cut, and fracture; [and] the preponderant illness category is 'dust diseases of the lungs.'"

The other three articles were published in the late 1990s. In "Occupational injury and illness rates, 1992–96: why they fell" (November 1998), Hugh Conway and Jens Svenson attributed a decline in occupational injury and illness rates during the early to mid-1990s to both legislative reforms in workers' compensation programs at the state level and industry initiatives aimed at reducing the cost of workers' compensation payments. Then, just 7 months later, in June 1999, John W. Ruser brought to light "The changing composition of lost-workday injuries." Examining BLS data for 1976–97, he found that "Cases with lost work time are now less likely to involve days away from work and more likely to involve only restricted work activity." Indeed, even when injured or ill workers take time off from work, they tend to return to work sooner, under the condition that they will be relieved of some of their job duties. Ruser attributed this new development in part to state legislative measures designed to control cost increases—measures such as mandatory employer safety and health programs, premium discounts for high-quality programs of that nature, and medical deductibles payable by the employer. Finally, in the last *Review* article of the 1990s on occupational injuries, Daniel S. Hamermesh, citing the well-known increase in income inequality over at least the previous 25 years, pointed out another, less well-known inequality that had arisen during that time: a "Changing inequality in work injuries and work timing" (October 1999). This kind of inequality, noted Hamermesh, includes "jobs' dangers, their unpleasantness (dirtiness, repetitiousness, and so forth), and perhaps even the esteem in which they are held" and, like income inequality, is falling more and more on the shoulders of low-wage workers. "What should no longer be debatable," he observed, "is that this increase in inequality is more widespread than [the increase in inequality] in the readily measured and much studied earnings measures."





The number of articles on workplace injuries and illnesses and on occupational safety and health published in the *Review* exploded during the period from 2000 to 2015. The period could be said to be characterized chiefly by two phenomena: (1) the prolific output of BLS economists William J. Wiatrowski and Stephen M. Pegula, who, between them, authored 13 articles over that timeframe, and (2) the publication of a special issue with 8 articles on occupational safety and health in October 2005. Sandwiched around and interspersed between these two phenomena were a host of articles too numerous to have the content of each one presented.

Pegula began it all in March 2004<sup>3</sup> with his article “Occupational fatalities: self-employed workers and wage and salary workers.”<sup>4</sup> Next, both Wiatrowski and Pegula published in the December 2004 issue. Wiatrowski’s article was titled “Occupational injury and illness: new recordkeeping requirements,” Pegula’s piece “Fatal occupational injuries at road construction sites.” Then, Wiatrowski had two entries in the October 2005 special issue on occupational safety and health (see next paragraph). Five years later, in November 2010, Pegula followed up on his 2004 piece with “Fatal occupational injuries at road construction sites, 2003–07.” Wiatrowski then published three articles in a span of a little over a year and a half: the tongue-in-cheek–titled “On guard against workplace hazards” (about the dangers faced by security guards) in February 2012; “Restricted work due to workplace injuries: a historical perspective,” coauthored with John W. Ruser in March 2013; and “Using workplace safety and health data for injury prevention” in October 2013. One month later, in November 2013, Pegula followed with another entry in the “road construction sites” series, “An analysis of fatal occupational injuries at road construction sites, 2003–2010,” and just 4 months after that, in February 2014, he discussed “Fatal occupational injuries involving contractors, 2011.” Wiatrowski finished the year 2014 with two articles in the June issue: “Comparing fatal work injuries in the United States and the European Union,” coauthored with Jill A. Janocha; and “Examining the completeness of occupational injury and illness data: an update on current research,” a solo effort.

In the October 2005 special issue on occupational safety and health, Wiatrowski led off with “Occupational safety and health statistics: new data for a new century,” an overview of the changes in BLS classification systems covering industries, occupations, race and ethnicity, and geographic areas that, together with changes in definitions and newly defined medical conditions, result in new data on occupational safety and health. Using these new data, 21st-century researchers will be able to understand the “safety and health picture of special populations, many of which are described more precisely under the new classification systems.” Following Wiatrowski’s article, Janice Windau and Samuel Meyer examined “Occupational injuries among young workers” and found that, despite falling fatality counts for many age groups over the 1993–2002 period, fatalities rose by 34 percent for 14- and 15-year-old workers. The authors attributed the rise to laws and regulations that, although designed to protect young workers from engaging in dangerous jobs, are not obeyed or are too narrow in scope, leaving the youths exposed to some of the same hazards that older workers are exposed to. Next, Wiatrowski teamed up with Elizabeth Rogers to investigate “Injuries, illnesses, and fatalities among older workers.” Although older workers experience workplace injury and illness similarly to the way their younger coworkers do, concluded the authors, “they sustain more severe injuries than their younger counterparts and require more days away from work to recover.” Then, Anne B. Hoskins studied “Occupational injuries, illnesses, and fatalities among women” and reported that, during 1992–2003, women experienced fewer workplace injuries and illnesses—both fatal and nonfatal—than men did. Nonetheless, the work-related injuries, illness, and fatalities they did experience were unique to them and, said Hoskins, hard to measure, although “much of [the] disparity can be explained by employment patterns within occupations and industries.”

Rogers and Wiatrowski’s article on older workers turned up some interesting findings. But one group of older workers had its own unique set of problems. Addressing their issues was Samuel Meyer, who examined “Fatal occupational injuries to older workers in farming, 1995–2002” and found that “Agricultural workers aged 55 years and older are at a higher risk of fatal occupational injury than their younger counterparts.” The fatality rate for workers in that age range who were in farming occupations, Meyer learned, was 10 times the rate for all

workers—a situation made all the more pointed by the fact, also discovered by the author, that workers ages 55 years and older constituted nearly one-third of all agricultural workers and accounted for more than half of the fatalities in farming occupations. The leading causes of fatalities among these workers were “transportation incidents, contact with objects or equipment, and assaults, including assaults by animals.” Next, Jessica R. Sincavage explored “Fatal occupational injuries among Asian workers” over the 5-year period between 1999 and 2003. Using the CFOI as her source of data, she discovered that, although Asians’ share of fatal work injuries was slightly lower than their share of the U.S. population, more than half of the fatalities resulted from a violent act and almost half of all those killed were homicide victims. Among her suggestions for further research was “a more indepth analysis of the fatal workplace injuries to self-employed Asian workers and of fatalities by occupation and detailed industry.”

Following Sincavage’s article was “Work-related hospitalizations in Massachusetts: racial/ethnic differences,” by Phillip R. Hunt, Jong Uk Won, Allard Dembe, and Letitia Davis, a penetrating look at hospital discharge data as a source for examining occupational health. The four researchers—two from the Massachusetts Department of Public Health, one from the University of Massachusetts Medical School, and one from Yonsei University, Seoul, South Korea—found statistically significant disparities in hospitalization rates for different kinds of work-related injuries among racial and ethnic groups. Specifically, they discovered that (1) Hispanic workers had significantly higher rates of hospitalization than White workers had for all work-related injuries combined and for fractures, open wounds, burns, and amputations; (2) Black workers had significantly higher rates of hospitalization than White workers had for strains and sprains and for amputations, and significantly lower rates than Whites did for fractures; and (3) Asian workers had significantly higher rates of hospitalization than White workers had for burns, and significantly lower rates than Whites had for all work-related injuries combined and for fractures and open wounds. The authors suggested that hospital discharge data “are an important supplementary means of examining occupational health and can be effective in assessing disparities in serious occupational injuries among racial and ethnic groups at the State level.” Finally, rounding out the special issue was Scott Richardson’s “Fatal work injuries among foreign-born Hispanic workers,” a visual essay in which the author concluded that “Disproportionate representation in higher-risk jobs has led to higher numbers and rates of fatal occupational injury among Hispanic workers.” From 1992 to 2004, a period during which fatalities were falling for workers in general, the number of fatalities suffered by Hispanic workers rose from 533 to 895. Because the kinds of events that cause fatal (and nonfatal) injuries vary from state to state, depending on the types of industries in the state, “interventions will need to focus more at a local level to be successful,” said Richardson.

Numerous other interesting and important articles on workplace injuries and illnesses and on occupational safety and health appeared in the *Review* from 2000 to 2015. In the March 2004 issue, “An international analysis of workplace injuries,” by Al-Amin Ussif, found that workplace injury rates increased in the United States, Canada, France, Finland, and Sweden as those countries’ economies expanded. Safety measures, however, appeared to have a countereffect, reducing injury rates considerably in the United States and Canada, less so in the three European countries. Further research, said the author, “will allow us to calculate annual changes in the indices of safety and risk at workplaces.” Later, Dino Drudi investigated “Railroad-related work injury fatalities” (July/August 2007), pointing out the hazardous nature of railroads, not only to employees in the railroad industry, but also to workers in other occupations. Among railroad workers, brake, signal, and switch operators are especially vulnerable; when workers in other occupations are fatally injured, it is often in a

collision between a rail vehicle and some other kind of vehicle, usually a motorized highway vehicle. The author noted that “The fatality rate for rail transportation occupations has improved, but is 3 times that for workers overall.”

Critics of the SOII claim that it undercounts the number of injury and illness incidents in the workplace. In “Examining evidence on whether BLS undercounts workplace injuries and illnesses” (August 2008), John W. Ruser responded to this criticism by listing five BLS measures which indicate that “The Bureau of Labor Statistics takes the allegations of underreporting seriously and has instituted a number of activities to understand and, where possible, address the issue”: (1) A 2007 BLS quality assurance survey indicated that SOII data collection processes did not result in an undercount along any of four dimensions cited by critics; (2) BLS is extending the scope of SOII to include all public-sector workers; (3) BLS has instituted a program of research to examine and extend previous research into the undercount; (4) BLS is undertaking focused interviews of employers to learn about past decisions they made regarding reporting injuries and illnesses to OSHA and to other data systems; and (5) BLS is exploring partnerships with other organizations to research the use of alternative data sources to complement SOII data. The author concluded by noting that, for a number of reasons, “SOII does not measure the total burden of workplace injuries and illnesses. However, SOII has advantages over other data systems” that make it a useful tool for learning about the nature and extent of injuries, illnesses, and fatalities experienced in the U.S. workplace.

In the last 5 years, a number of authors have continued to write about specific kinds of workplace injuries and illnesses and the safety and health measures that have been established to deal with them. Also, many have continued to write about the workplace injuries, illnesses, and fatalities suffered by workers in different industries and occupational and demographic groups. The titles alone of the articles indicate the broad range of industries, occupations, and groups studied: besides Wiatrowski’s earlier mentioned “On guard against workplace hazards” and Pegula’s two articles on road construction sites, there were “Can you hear me now? Occupational hearing loss, 2004–2010” (Luis Felipe Martínez, July 2012); “Stop, drop, and roll: workplace hazards of local government firefighters, 2009” (Gary M. Kurlick, November 2012); “Hispanic/Latino fatal occupational injury rates” (Christen G. Byler, February 2013); “Using OSHA inspection data to analyze respirator protection program compliance” (John Mendeloff, Maryann D’Alessandro, Hangsheng Liu, Elizabeth Steiner, Jessica Kopsic, and Rachel Burns, December 2013); “Fatalities in the construction industry: findings from a revision of the BLS Occupational Injury and Illness Classification System” (Xiuwen (Sue) Dong, Julie A. Largay, Xuanwen Wang, and Janice A. Windau, July 2014); “When the wheels on the bus stop going round and round: occupational injuries, illnesses, and fatalities in public transportation” (Gina Dowdell Hunter, February 2015); “A look at violence in the workplace against psychiatric aides and psychiatric technicians” (Jacqueline Longton, March 2015); and “Workplace hazards of truck drivers” (Sean M. Smith, April 2015).

### **100 years of the *Monthly Labor Review***

In 1915, when Commissioner Royal Meeker established the *Monthly Review*, the stated purpose of the new publication was to publish “the results of original investigations...[and] notices of labor legislation,” with attention paid to “the current work of this bureau [BLS], the other bureaus of the Department of Labor, or any other Government agencies dealing directly with labor matters.” In addition, the *Review* would “report [on] industrial accidents and occupational or industrial diseases...industrial and vocational surveys, the better housing of



workingmen, and any other activities [aimed at] the betterment of industrial conditions....” In the 100 years since then, it can fairly be said that the *Review* has done that—and much more. Now the flagship journal of BLS, the *Review* has become the government’s foremost publication on labor economics, with government officials, union leaders, labor economists, academicians of all stripes, BLS and other Department of Labor staff, and even one author who later became a vice-president’s chief economist and economic adviser<sup>5</sup> contributing to its pages. The *Review* has reported on timely economic topics that occupy the forefront of the nation’s attention and that affect all of its citizens, all the while maintaining a position of neutrality in the political arena. Topics covered have ranged from pay to prices to poverty, from consumer expenditures to childcare to collective bargaining, and from immigration to inflation to injuries and illnesses in the workplace. As the decades have passed, the *Review* has reported on increasingly sophisticated statistical methods and programs to collect and analyze the economic data so vital to our economy and so necessary to our understanding of it. Truly, it can be said, as Lawrence R. Klein, editor in chief for 22 years, so eloquently did on the occasion of the journal’s 75th anniversary, that the *Review* has changed “from a staid, sober, reliable journal to an innovative, exciting, sober, reliable journal,”<sup>6</sup> and it remains so to this day.

## NOTES

<sup>1</sup> BLS no longer uses the terms “white-collar” and “blue-collar” to describe occupations. The terms were discontinued in the switch from the Occupational Classification System (OCS) to the Standard Occupational Classification (SOC) system. For a discussion of the issue, see Fehmida Sleemi, “Employment Cost Index publication plans,” *Monthly Labor Review*, April 2006, pp. 6–11, <https://www.bls.gov/opub/mlr/2006/04/art2full.pdf>, especially p. 7.

<sup>2</sup> Pension integration does have its critics, who maintain that, under it, low-wage workers may receive low or no benefits from integrated plans. (See, e.g., James H. Schulz and Thomas D. Leavitt, *Pension integration: concepts, issues, and proposals* (Washington, DC: Employee Benefit Research Institute, 1983), especially pp. 37–65.

<sup>3</sup> Not a single article on workplace injuries and illnesses or occupational safety and health was published in the *Review* from 2000 to 2003.

<sup>4</sup> Space constraints prohibit going into the content of this article and the others by Pegula and Wiatrowski mentioned in this paragraph. Suffice it to say that their titles are self-explanatory, at least as regards the topics they discuss. The interested reader should, of course, peruse the articles themselves at the *Monthly Labor Review* website, <https://www.bls.gov/opub/mlr/>.

<sup>5</sup> Jared Bernstein, who coauthored three *Review* articles: “Has wage inequality stopped growing?,” December 1997, pp. 3–16; “Immigration and poverty: how are they linked?,” April 2003, pp. 10–15; and “Exploring low-wage labor with the National Compensation Survey,” November/December 2003, pp. 3–12.

<sup>6</sup> Lawrence R. Klein, “Recollections of a former editor,” *Monthly Labor Review*, June 1990, pp. 50–55, <https://www.bls.gov/opub/mlr/1990/06/art4full.pdf>.

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